File Updated 7/16/01 – A20 revised (update shown in **bold italics**)

- 1) Mission Confirmation Review
- Q: Can objective criteria be provided to the teams **now** regarding the downselect at Step 3? (Mission Confirmation) How will the "proposed" missions be evaluated against each other? Obviously we know that NPG 7120.5 guides the usual mission confirmation but provides an absolute standard. If this standard is met, the mission will be confirmed. In case of ESSP-AO3, the absolute standards **can** be met, by each mission independently, **and** yet some missions will be terminated. What will be used to decide termination at **mission confirmation**?
- A: For objective criteria on the confirmation review, see the Earth Explorers Mission Assurance Guidelines and Requirements (ESSP-3 AO Appendix H). The Mission Design Review will assess the projects' ability to meet mission success criteria of cost, schedule and performance. The ESE AA will decide, based on the briefing of findings by the executive committee, which project teams will proceed to Confirmation Review. The AA's decision will be based upon the science value, the feasibility to implement the mission successfully (Level One) and the funding priorities of the ESE.

Upon selection to proceed by the AA ESE, the project will hold a Mission Confirmation Review with the Goddard PMC. The criteria to be confirmed is strictly the recommendation of the Goddard PMC, based ion the project's ability to achieve mission success. Should a mission not be selected for confirmation, it is not considered termination, and the PI can repropose later.

- 2) Step-Two Evaluation Process
- **Q:** Will there be a full science evaluation in Step 2 or just evaluation of changes?
- A: Step Two will include a full evaluation of the science/applications.
- 3) AO Technical Requirements
- **Q:** Is debris assessment required for Step One?
- A: Debris Assessment is not required for Step One. General information on Orbital debris will be derived from spacecraft size and general orbit information. (Phil Napala)
- 4) AO Cost Requirements
- Q: The available funding for formulation is inconsistent with the requirements to reach PDR/MDR. NIAT has emphasized the importance of an adequate formulation process, and GSFC PMC expects this. Is ESSP willing to accept a "PDR-lite" and push traditional preliminary data into the implementation phase?

A: No. PI's should propose the necessary funding for the task and schedule proposed. A "PDR-lite" and delaying formulation activities for implementation phase are not acceptable. We are in the process of reevaluating the funding profiles for this effort.

5) Miscellaneous

- Q: I'm interested in teaming. Is there a plan to publish the attendees of this preproposal conference? The "ESSP Teaming Interest" site only contains a subset of contractors. How can I find out who the major (prime) contractors are likely to be?
- A: The attendees list from the Pre-Proposal conference will be listed on the ESSP AO website at http://centauri.larc.nasa.gov/essp/ESSP_ppcattend.pdf. For a list of major contractors, see the list of parties interested in teaming in the handout available today or on the ESSP AO website.

6) <u>Launch Services</u>

- **Q:** MO and DA budget must include reserved retrieval cost for ISS payload considerations. How do we estimate this?
- A: For payloads that fly on the International Space Station (ISS), the payload must support retrieval from orbit and return to the ground. The PI's MO and DA budget must include the support costs necessary for the PI and his/her team to perform the retrieval activities such as flight and ground safety reassessments, ground handling of the hardware upon return, developing any new procedures and deintegration and return of any ISS carrier hardware or other government-owned hardware to a government-designated facility. There is no charge to the PI for transportation of the ESSP payload back to Earth on the STS.

7) Launch Services

- **Q:** If we contract with a U.S. launch service that is not on NASA contract, must we still meet the NASA policies on launch services?
- A: Yes, the offeror must explain how they will meet the launch service policies whether it is a NASA-contracted or PI-contracted launch service.

8) <u>Development Time</u>

- Q: AO states that time from MCR through launch is 36 months. Statements in the PreProposal conference mentioned this timeframe was "nominal." Can a proposer offer a mission with less than 36 month development, or a mission with greater than 36 month development? Is there a limit to either an earlier or later end date?
- A: The AO calls for a nominal period of 36 months to achieve launch readiness. Final selections will not be made before June 2003. The funding profile for ESSP is

based on flights using a NASA-provided ELV in 2006. <u>IF</u> the mission cost is low enough, then some flexibility may be allowed. Be sure to allow for storage and team retainage costs should your schedule be less than 36 months and your launch slips. If your schedule is longer that 36 months, make sure you have enough reserve(contingency) in your budget to cover a longer duration mission schedule. Your mission also has to fit within the ESSP-3 funding profile given at the conference and that may also effect your schedule.

9) Miscellaneous

- Q: For proposers not familiar with RSDO etc., this is way too late to find out about assessments. Also, new cost and evaluation info is difficult to incorporate this late. Two suggestions: 1) in the future hold conference within one week of AO release and 2) consider extending the due date for Step One so proposers can best meet your requirements. We want to give you good proposals and successful missions help us be responsive!
- A: We cannot extend the deadline for the submission of the ESSP-3 Step One proposals. However, your suggestion will be taken into consideration for the next round.
- 10) AO Cost Requirements
- Q: Cost Table K-9 has a top section and a lower section (Development? and Ops?). Is the upper section exclusively for pre-launch and the lower section exclusively for post launch?
- A: No. The top section, "Mission Development," is intended for development activities. The bottom section, "Launch and Mission Operations," includes prelaunch and launch activities, as well as operations activities.
- 11) Miscellaneous (similar to #9)
- **Q:** By holding this conference within one month of proposal due date, much of the information provided, particularly cost, will be "challenging" to incorporate into the formal review processes at the home institutions. In the future, can you hold this conference within one week of AO release?
- A: Your suggestion will be taken into consideration for the next round.
- 12) Miscellaneous
- **Q:** Will the presentation charts from this pre-proposal conference be posted on the web?
- A: Yes, all presentations are available at: http://centauri.larc.nasa.gov/essp/overcharts.html
- 13) Miscellaneous

- **Q:** How much time is there between mission confirmation review and mission implementation?
- A: Once a mission successfully completes mission confirmation, the implementation phase begins immediately.

14) AO Management Requirements

- Q: AO Section 3.7 states "use innovative approaches necessary to stay within the strict cost and schedule limits." How do we coordinate such streamlining with NASA for review and approval? Is there a penalty for recommending tailoring of the cost reporting and mission assurance guidelines called for in the AO?
- A: NASA NPG 7120.5 states that tailoring of project requirements is based on several factors. The PI should coordinate with the Earth Explorers Program Office and the EEP mission manager to assess and receive approval for tailoring of project requirements. Tailoring of financial requirements is negotiable with the EEP office. However, the intent of the AO must be upheld and shall not be compromised.

15) AO Contributions

- **Q:** Are US government contributions (other than NASA) counted within the \$125M cap? It is our understanding, for example, that services, infrastructure or products contributed/provided by a US government agency (not NASA) are part of total mission cost but not counted against the \$125M.
- A: Contributions by non-NASA US government agencies are part of the total mission life cycle cost (TMLCC), but are not included in the \$125M NASA ESE cost cap.

16) AO Cost Contributions

- Q: If my institution has previously developed parts of the proposed flight hardware Using other US govennment funds, is that funding deducted from the \$125 M?
- A: Previously developed hardware and software are not deducted from the \$125M cost cap. The \$125M cost cap is for NASA ESE funding that begins with Step Two Selection.

- **Q:** Resumes are required for Step One. Are Step One resumes for science team and PI only? Are resumes for other key individuals such as PM and system engineer required for Step One? Optional for Step One?
- A: As stated in Appendix K, Section L (Appendices), resumes or curriculum vitae for all NAMED team members are required. Project manager must be named in Step Two.
- 18) Step One Evaluation Criteria
- **Q:** Will the 6-8 proposals rated "selected" or "encouraged" to proceed to submit Step Two be ranked, and will the rankings be made available to PI's?
- A: No, the proposals will not be ranked. The PI will receive an evaluation form from the Step-Two process which will discuss proposal 'strengths' and 'weaknesses'.
- 19) Launch Services
- Q: As a mission option, the AO states that the EXPRESS Pallet or WORF may be utilized aboard the ISS. Is there a limit on the mission length if an EXPRESS pallet is chosen? Also, do NASA ESE funds cover the cost of launch services to the ISS
- A: The amount of time an instrument can be left on orbit depends on the amount of time required to obtain the proposed science/applications data and the priority of other missions waiting for flight. All proposers should assume that they will be allowed to remain on orbit as long as it is necessary to obtain the data but may be required to justify extended on orbit stays.

Yes, NASA ESE funds will cover the cost of launch services to the ISS. However, costs associated with using using the launch services (i.e. support for payload integration to carriers, document preparation [ICDs, Safety Data Packages] & payload review travel costs) are <u>not</u> included and should be included in your proposed mission cost estimate.

20) Launch Services

Q: In the ESSP AO in the '3.1.4 Launch Services' section, in the second paragraph on page 17 it says:

"Please note that although NASA will fund the Government launch services separately, NASA

Earth Science Launch Services Cost will be considered and evaluated as part of the total NASA Mission Cost. All launch services shall be costed in the proposal whether funded by NASA or not."

However, at the Preproposal Conference it was said that there was no cost associated with using the Space Shuttle, which is the vehicle we were going to propose. Does this mean that in our proposal we should say there are no launch costs associated with putting an instrument on the EXPRESS Pallet since it is going to be launched by the Space Shuttle? Or do we have to come up with some estimate of launching an

instrument on the Shuttle?

Any help and or guidance you could give would be greatly appreciated.

A: While there is no cost for the Shuttle launch itself, there will be costs incurred in preparing your payload for a shuttle flight and supporting the integration of your payload to its carrier at KSC. This carrier is the EXPRESS Pallet for pallet payloads. WORF payloads have several transportation options including shuttle lockers, spacehab, or the MPLM. In addition to considering *your* personnel at KSC during integration and costs for payload required non-standard services (reference the ISS document in the Program Library), the Research Program Office (RPO) at GSFC is preparing files that will help define the documents you need to supply and reviews you have to attend to launch a payload on the shuttle and operate it on the ISS. These documents do not necessarily contain all of the requirements necessary to launch a payload on the shuttle and fly on the ISS since the requirements are still evolving as the ISS is being built. They will, however, help you better understand what your mission will have to provide to NASA so you can budget the appropriate resources. These files are under review by JSC and will be posted on the RPO website (http://rpo-iss.gsfc.nasa.gov/). Support for payload retrieval and return flight on the shuttle at the end of the payload life will also need to be considered. See A6 for more information on payload retrevial costs.